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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,374	02/17/2004	Emanuel Elyasaf	PDC/RT/8633	1801

7590 10/05/2006

PATENT COUNSEL
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EXAMINER

PUNNOOSE, ROY M

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/780,374	Applicant(s) ELYASAF ET AL.	
	Examiner Roy M. Punnoose	Art Unit 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-58 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 47 is generic to the following disclosed patentably distinct species:
 - a. A method of inspecting an article, comprising the steps of: acquiring a first frame image of a first field of view of said article; acquiring a second frame image of a second field of view of said article, wherein said first field of view and said second field of view have an overlap; and identifying blemish locations having substantially constant frame coordinates on said first frame image and said second frame image as claimed in claims 1-11.
 - b. A method of inspecting an article employing an optical imaging system, comprising the steps of: preparing a pre-scan mask of blemishes of said optical imaging system; determining blemish displacements between pairs of said blemishes that are aligned in a scan direction; selecting a frame overlap of consecutive image frames of said article that is distinct from all of said blemish displacements; acquiring a first frame image and acquiring a second frame image of said article that overlaps said first frame image at said frame overlap; and masking said first frame image and said second frame image with said pre-scan mask as claimed in claims 12-19.
 - c. A method of inspecting an article, comprising the steps of: directing a beam from said article through optics along a plurality of optical paths; disposing a first camera in one of said optical paths, said first camera having a first field of view of said article and a second camera in another of said optical paths, said second camera having a second field of view of said article, wherein said first field of view and said second field of view have an overlap; acquiring a first frame image of said article with said first camera, and acquiring a second

frame image of said article with said second camera; identifying blemish locations having substantially constant frame coordinates on said first frame image and said second frame image; and identifying a defect in said first frame image and in said second frame image, wherein a frame displacement of said defect corresponds to said overlap, and wherein a location of said defect on at least one of said first frame image and said second frame image avoids said frame coordinates of said blemish locations thereon as claimed in claims 25-34.

Claims 35 is generic to the following disclosed patentably distinct species:

d. An optical inspection apparatus of inspecting an article, comprising: a scanner for illuminating said article in a scan direction; a detector for detecting frame images of said article; beam directing optics for directing light from said article to said detector; a controller for controlling said scanner and said detector to acquire said frame images portions at a frame overlap; and an image processor adapted to prepare a pre-scan mask of system blemishes, wherein said frame overlap is selected to be distinct from all displacements between pairs of said blemishes that are aligned in said scan direction, said image processor being further adapted to mask said frame images with said pre-scan mask as claimed in claims 20-24.

2. The species are independent or distinct for reasons stated above. Applicant is required under 35 U.S.C. 121 to elect a single set of disclosed species (i.e. a method, and an apparatus to carry-out said method), even though this requirement is traversed. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant

with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

3. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

4. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the

currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

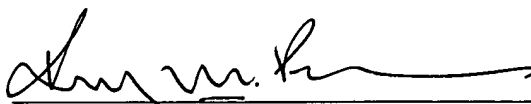
Contact/Status Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Roy M. Punnoose** whose telephone number is **571-272-2427**. The examiner can normally be reached on 9:00 AM - 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Gregory J. Toatley, Jr.** can be reached on **571-272-2800 ext.77**. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

September 26, 2006


Roy M. Punnoose
Patent Examiner
Art Unit 2877